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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07).

	Application No.	Applicant(s)
Office Action Summary	10/041,761	YOON ET AL.
	Examiner	Art Unit	
	Hung Q. Dang	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 September 2007</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>10 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 09/05/2007 have been fully considered but they are not persuasive.

The amendment submitted by Applicant does not overcome 35 U.S.C 101 rejections because the computer readable recording medium recited in claims 1-14 does not store functional descriptive material. See details below.

At pages 10-11, regarding claim 1, the Applicant argues that Ando does not disclose a second application packet, an end of which represents an end of the SOB. Specifically, the Applicant argues that the description of ECC block #β or any other block may not be applied to ECC block #ε, which is the last ECC block of the second SOBU.

In response, the Examiner respectfully disagrees. Regarding ECC block #ε, Ando also gives similar description in column 18, lines 42-49. In this cited section, Ando recites a situation when the user ends recording somewhere in the middle of the second SOBU. The rest is recorded with padding data. Before recording the padding data, an end code is recorded (column 17, lines 39-45). This is also illustrated in Fig. 1(j), as described, the transport packet z is the last packet of the second SOBU (Stream Block #2) that carries meaningful data while the rest of the second SOBU is padding data. Having said that, the end of transport packet z, which is marked by end code 32 clearly represents the end of the second SOBU, which is also an end of the SOB because the second SOBU is the last SOBU of the SOB. At the same time, the end code 32 in Fig.

1(j) also represents a mid-point of the second SOBU because it is the point where the

user ends recording. As described in column 18, lines 42-49, the user ends recording at

some mid-point of the second SOBU.

For that reason, Ando clearly discloses the limitation of "the second SOBU

including a second packet, an end of which represents an end of the SOB and a mid-

point of the second SOBU."

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent

Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV,

reads as follows:

> Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material , such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention

is directed to non-statutory subject matter as follows.

Claims 1-14 recite a content stream, which contains an arrangement of pure data

and does not impart functionality to a computer or computing device, and is thus

considered nonfunctional descriptive material. Such nonfunctional descriptive material,

in the absence of a functional interrelationship with a computer, does not constitute a

statutory process, machine, manufacture or composition of matter and is thus non-

statutory per se.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-33 are rejected under 35 U.S.C. 102(e) as being anticipated by

Ando et al. (U.S. Patent 6,373,803), which has an effective priority date of parent

U.S. application No. 09/660,556 filed on September 12th, 2000, which fully

discloses the claimed invention.

Regarding claim 1, Ando et al. anticipate a stream data generation method;

hence, a computer readable recording medium on which the stream data to be read and

executed by the computer is recorded, comprising: A Stream Object (SOB) formed with

first and second Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-20;

column 7, lines 32-38), the first SOBU including first and second application time

stamps (ATS) that indicate reproducing time information of the SOBU, and a first

application packet disposed between the first and second ATS in which a portion of the

content stream data is packed (Fig. 1f, 1e, 1c, 1b, and 1a; column 4, lines 14-16, 19-

20), and the second SOBU including a second application packet (Fig. 1e, 1d, 1b, 1a),

and end of which represents an end of the SOB (Fig. 1e, 1d, 1b, 1a; "Stream Block #2";

"ECC Block #ε"'s version of "Transport Packet f"; column 17, lines 39-45; column 18,

lines 42-49; Fig. 1(j); also see the "Response to Arguments" above) and a mid-point of

the second SOBU (column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see

the "Response to Arguments" above), and a stuffing packet in which the second ATS is

copied and in which a payload is recorded (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC

Block #ε"'s version of "Padding Area 36"; column 36, lines 48-51; column 36, lines 41-

44; column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j)).

Regarding claim 6, Ando et al. anticipate a stream data generation method;

hence, a computer readable recording medium on which the stream data to be read and

executed by the computer is recorded, comprising: A Stream Object (SOB) formed with

first, second, and third Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-

20; column 7, lines 32-38; Fig. 4), the first SOBU including first and second application

time stamps (ATS) that indicate reproducing time information of the SOBU as well as a

first application packet disposed between the first and second ATS in which a portion of

the content stream data is packed (Fig. 1f, 1e, 1c, 1b, and 1a; column 4, lines 14-16,

19-20), the second SOBU including a second application packet (Fig. 1e, 1d, 1b, 1a),

and end of which represents an end of the SOB (Fig. 1e, 1d, 1b, 1a; "Stream Block #2";

"ECC Block #ε"'s version of "Transport Packet f"; column 17, lines 39-45; column 18,

lines 42-49; Fig. 1(j); also see the "Response to Arguments" above) and a mid-point of

the second SOBU (column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see

the "Response to Arguments" above), and a stuffing packet in which the second ATS is

copied and in which a payload is recorded (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC

Block #ε"'s version of "Padding Area 36"; column 36, lines 48-51; column 36, lines 41-

44), and the third SOBU including stuffing packets for correction including an ATS

(column 36, lines 49-54).

Regarding claim 15, Ando et al. anticipate a recording apparatus (column 13,

lines 24-26) to record content stream data as a Stream Object (SOB) formed with at

least one Stream Object Unit (SOBU) (Figs. 1e-1g, column 11, lines 19-20) having a

predetermined size (column 7, lines 36-38; column 10, lines 61-67) and one or more

stream packs (column 4, lines 16-18; column 7, lines 34-35, 39), each of the stream

packs having one or more transport packet/application packet (column 4, lines 14-16)

having an Application Time Stamp indicating reproducing time information (column 4,

lines 19-20) and an application packet in which content stream data is packed (column

4, lines 14-16), the recording apparatus comprising: (1) a control unit (main MPU) that

generates a SOBI, which contains a mapping list as search information (column 10,

lines 35-38; column 26, lines 38-41); (2) a clock generation unit that generates a clock

value (column 20, lines 46-48; column 24, lines 1-8); (3) a buffer unit that attaches the

clock value provided from said clock generating unit to received content stream data,

and outputs the received content stream data by buffering the content stream data

(column 20, lines 46-51); (4) a formatter, which is the stream object unit (SOBU)

generating unit first and second Stream Object Units (SOBUs) (Figs. 1e-1g, column 11,

lines 19-20; column 7, lines 32-38), the first SOBU including first and second application

time stamps (ATS) that indicate reproducing time information of the SOBU, and a first

application packet disposed between the first and second ATS in which a portion of the

content stream data is packed (Fig. 1f, 1e, 1c, 1b, and 1a; column 4, lines 14-16, 19-

20), and the second SOBU including a second application packet (Fig. 1e, 1d, 1b, 1a),

and end of which represents an end of the SOB (Fig. 1e, 1d, 1b, 1a; "Stream Block #2";

"ECC Block #ε"'s version of "Transport Packet f"; column 17, lines 39-45; column 18,

lines 42-49; Fig. 1(j); also see the "Response to Arguments" above) and a mid-point of

the second SOBU (column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see

the "Response to Arguments" above), and a stuffing packet in which the second ATS is

copied and in which a payload is recorded (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC

Block #ε"'s version of "Padding Area 36"; column 36, lines 48-51; column 36, lines 41-

44); (5) and a recording unit which records the SOBUs generated by said SOBU

generating unit and the mapping list generated by said control unit (column 14, lines 63-

67; column 15, lines 1-11, column 21, lines 60-65).

Regarding claim 20, Ando et al. anticipate a recording apparatus for recording

content stream data as a Stream Object (SOB) formed with at least one Stream Object

Unit (SOBU) (Figs. 1e-1g, column 11, lines 19-20) having a predetermined size (column

7, lines 36-38; column 10, lines 61-67), the recording apparatus comprising: (1) a

control unit (main MPU) that generates a SOBI, which contains a mapping list as search

information (column 10, lines 35-38; column 26, lines 38-41); (2) a clock generation unit

that generates a clock value (column 20, lines 46-48; column 24, lines 1-8); (3) a buffer

unit attaching the clock value provided from said clock generating unit to received

content stream data, and outputting the received content stream data by buffering the

content stream data (column 20, lines 46-51); (4) a formatter, which is stream object

unit (SOBU) generating unit (column 14, lines 57-62) to generate first, second, and third

Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-20; column 7, lines 32-

38; Fig. 4), the first SOBU including first and second application time stamps (ATS) that

indicate reproducing time information of the SOBU as well as a first application packet

disposed between the first and second ATS in which a portion of the content stream

data is packed (Fig. 1f, 1e, 1c, 1b, and 1a; column 4, lines 14-16, 19-20), the second

SOBU including a second application packet (Fig. 1e, 1d, 1b, 1a), and end of which

represents an end of the SOB (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC Block #ε"'s

version of "Transport Packet f"; column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j);

also see the "Response to Arguments" above) and a mid-point of the second SOBU

(column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see the "Response to

Arguments" above); and a stuffing packet in which the second ATS is copied and in

which a payload is recorded (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC Block #ε"'s

version of "Padding Area 36"; column 36, lines 48-51; column 36, lines 41-44), and the

third SOBU including stuffing packets for correction including an ATS (column 36, lines

49-54); and (5) a recording unit which records the SOBUs generated by said SOBU

generating unit and the mapping list generated by said control unit (column 14, lines 63-67; column 15, lines 1-11, column 21, lines 60-65):

Regarding claim 27, Ando et al. anticipate a recording apparatus (column 13, lines 24-26) to record a Stream Object (SOB) formed with first and second Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-20; column 7, lines 32-38), the first SOBU including first and second application time stamps (ATS) that indicate reproducing time information of the SOBU, and a first application packet disposed between the first and second ATS in which a portion of the content stream data is packed (Fig. 1f, 1e, 1c, 1b, and 1a; column 4, lines 14-16, 19-20), and the second SOBU including a second application packet (Fig. 1e, 1d, 1b, 1a), and end of which represents an end of the SOB (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC Block #ε"'s version of "Transport Packet f"; column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see the "Response to Arguments" above) and a mid-point of the second SOBU (column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see the "Response to Arguments" above); and a stuffing packet in which the second ATS is copied and in which a payload is recorded (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC Block #ε"'s version of "Padding Area 36"; column 36, lines 48-51; column 36, lines 41-44), the recording apparatus comprising: (1) a clock generation unit to generate a clock value (column 20, lines 46-48; column 24, lines 1-8); (2) a buffer unit to attach the clock value provided from said clock generating unit to received content stream data, and to output the received content stream data (column 20, lines 46-51); (3) a formatter, which is a stream object unit (SOBU) generating unit to generate SOBUs by packing the received

content stream data output from said buffer unit (column 14, lines 57-62); (4) a main

MPU, which is the control unit, to generate a SOBI, which contains a mapping list as

search information (column 10, lines 35-38; column 26, lines 38-41) by regarding a last

one of the SOBUs which has no corresponding ATS as having a virtual ATS (column

36, lines 48-54); and (5) a recording unit to record the SOBUS generated by said SOBU

generating unit and the mapping list generated by said control unit (column 14, lines 63-

67; column 15, lines 1-11, column 21, lines 60-65).

Claim 28 recites the control unit generating a mapping list (column 26, lines 46-

56) having an incremental application packet arrival time (IAPAT) obtained by regarding

a last application packet included in the SOB as having a virtual ATS.

Ando et al. anticipate the control unit generating a mapping list having an

incremental application packet arrival time (IAPAT) (column 11, lines 36-43, fig. 5;

column 22, lines 4-8) obtained by regarding a last application packet included in the

SOB as having a virtual ATS (column 36, lines 29-35, lines 48-54).

Regarding claim 29, Ando et al. anticipate a reproducing apparatus (column 13,

lines 24-26) to reproduce content stream data from a recording medium on which

content stream data is recorded as a Stream Object (SOB) formed with first, second,

and third Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-20; column 7,

lines 32-38; Fig. 4), the first SOBU including first and second application time stamps

(ATS) that indicate reproducing time information of the SOBU as well as a first

application packet disposed between the first and second ATS in which a portion of the

content stream data is packed (Fig. 1f, 1e, 1c, 1b, and 1a; column 4, lines 14-16, 19-

20), the second SOBU including a second application packet (Fig. 1e, 1d, 1b, 1a), and

end of which represents an end of the SOB (Fig. 1e, 1d, 1b, 1a; "Stream Block #2";

"ECC Block #ε"'s version of "Transport Packet f"; column 17, lines 39-45; column 18,

lines 42-49; Fig. 1(j); also see the "Response to Arguments" above) and a mid-point of

the second SOBU (column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see

the "Response to Arguments" above); and a stuffing packet in which the second ATS is

copied and in which a payload is recorded (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC

Block #ε"'s version of "Padding Area 36"; column 36, lines 48-51; column 36, lines 41-

44), and the third SOBU including stuffing packets for correction including an ATS

(column 36, lines 49-54), the reproducing apparatus comprising: (1) a stream data

playback controller, which is a reading unit, to read a mapping list as search information

and a corresponding SOBU, where the mapping list has search information (column 22,

lines 33-37; 44-56) generated by regarding the last SOBU as an SOBU having a virtual

ATS (column 36, lines 29-35, lines 48-54); (2) a main MPU, which is a control unit, to

control the reading unit to read the corresponding SOBU, referring to the mapping list

read by the reading unit (column 22, lines 33-41); (3) a clock generating unit to generate

a clock value (column 20, lines 46-48; column 24, lines 1-8); (4) an separator, which is a

SOBU analyzing unit, to extract content stream data by analyzing the SOBU read by

said reading unit (column 23, lines 23-29); and (5) a buffering unit to output the content

stream data from the SOBU analyzing unit by buffering the content stream data based

on a clock value provided by said clock generating unit (column 20, lines 46-51).

Claim 21 recites all SOBUs, excluding a last SOBU, have at least two entire

ATSs, which is anticipated by Ando et al. (column 17, lines 5-8; column 20, lines 57-59).

Claim 22 recites said SOBU generating unit including a stuffing packet for

correction in the last SOBU, which is anticipated by Ando et al. (column 20, lines 60-62).

Claims 7 and 23 recite the stuffing packet for correction is recorded continuously

after a last application packet included in the SOB, which is clearly anticipated by Ando

et al. (column 34, lines 25-26).

Claim 8 and 24 recite the predetermined ATS included in the stuffing packet for

correction has the same value as an ATS included in the last stream pack, which is

anticipated by Ando et al. (column 36, lines 49-51).

Claims 9, 25 and 10, 26 recite the stuffing packet for correction further includes a

payload in which predetermined data is recorded or no data is recorded, and a "0" is

recorded respectively, which is anticipated by Ando et al. (column 36, lines 23-26).

Claims 2, 11, and 16 recite the size of the application packets is small enough so

that the SOBUs, excluding the last SOBU, includes at least two entire ATS, which is

clearly anticipated by Ando et al. (column 17, lines 5-8; column 20, lines 57-59).

Claim 3, 12, 17 and 4, 13, 18 recite the size of the application packet satisfies the

equation: $AP\_PKT\_SZ \le SPayload\_SZ \times \{SOBU\_SZ/2\} - \{cell((N\_AHE + N\_SByte)/2) + ATS\_SZ\}$; and

$AP\_PKT\_SZ \le 2018 \times \{SOBU\_SZ\} - 6$, respectively

where AP_PKT_SZ denotes the size of the application packet, ATS_SZ denotes

a size of an ATS which is formed in units of bytes, SOBU_SZ denotes a size of an

SOBU, SPayload_SZ denotes a size of a data space containing information excluding a

fixed header area of a stream pack, N_AHE denotes a number of application header

extensions of a corresponding SOBU, and N_SByte denotes a number of stuffing bytes

of a corresponding SOBU.

Ando et al. anticipate the size of a stream pack or sector being 2048 bytes (Fig.

26; column 17, line 5) and each of the data area, after various header sizes are

subtracted, can record approximately 10 transport packets (or application packets)

(column 17, lines 5-8), each of which having an application time stamp (ATS) at its head

position (column 33, lines 65-67). Based on this anticipation, the following condition is

established:

$$10 \times (AP\_PKT\_SIZE + ATS) \leq 2027, \text{ or equivalent}$$

$$AP\_PKT\_SZ \leq 2027 - 10 \text{ ATS.}$$

Under this observation, the claimed range obviously overlap the range disclosed

by Ando et al., thus is anticipated (MPEP 2131.03).

Claims 5, 14, 19, and 30 recite a MAPping List (MAPL) having an Incremental

Application Packet Arrival Time (IAPAT) indicating a duration of the corresponding

SOBU as search information indicating which of the SOBUs are included in a

corresponding SOB.

Ando et al. anticipate a MAPping List (MAPL) (column 26, lines 46-56) having an

Incremental Application Packet Arrival Time (IAPAT) indicating a duration of the

corresponding SOBU (column 11, lines 36-43, fig. 5; column 22, lines 4-8) as search

information indicating which of the SOBUs are included in a corresponding SOB

(column 22, lines 42-56).

Claim 31 recites the predetermined ATS included in the stuffing packet for

correction has the same value as an ATS included in the last stream pack of the

SOBUs, which is anticipated by Ando et al. (column 36, lines 49-51).

Claim 32 recites the stuffing packet for correction further includes a payload in

which predetermined data is recorded or no data is recorded, which is anticipated by

Ando et al. (column 36, lines 23-26).

Regarding claim 33, Ando et al. anticipate an apparatus comprising: (1) a

recording apparatus (column 13, lines 24-26) to record a Stream Object (SOB) formed

with first and second Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-

20; column 7, lines 32-38), the first SOBU including first and second application time

stamps (ATS) that indicate reproducing time information of the SOBU, and a first

application packet disposed between the first and second ATS in which a portion of the

content stream data is packed (Fig. 1f, 1e, 1c, 1b, and 1a; column 4, lines 14-16, 19-

20), and the second SOBU including a second application packet (Fig. 1e, 1d, 1b, 1a),

and end of which represents an end of the SOB (Fig. 1e, 1d, 1b, 1a; "Stream Block #2";

"ECC Block #ε"'s version of "Transport Packet f"; column 17, lines 39-45; column 18,

lines 42-49; Fig. 1(j); also see the "Response to Arguments" above) and a mid-point of

the second SOBU (column 17, lines 39-45; column 18, lines 42-49; Fig. 1(j); also see

the "Response to Arguments" above); and a stuffing packet in which the second ATS is

copied and in which a payload is recorded (Fig. 1e, 1d, 1b, 1a; "Stream Block #2"; "ECC

Block #ε'''s version of "Padding Area 36"; column 36, lines 48-51; column 36, lines 41-

44), said recording apparatus including: (1) a recording control unit to generate a

mapping list as search information (column 10, lines 35-38; column 26, lines 38-41); (2)

a clock generation unit to generate a clock value (column 20, lines 46-48; column 24,

lines 1-8); (3) a buffer unit to buffer input content stream data, to add the clock value

provided by the clock generation unit to the input content stream data, and to output a

result (column 20, lines 46-51); (4) a formatter, which is a Stream Object Unit (SOBU),

generating unit to generate the SOBUs (column 14, lines 57-62), each of the SOBUs,

excluding a last one of the SOBUs and SOBUs having stuffing packets, includes at least

two entire ATSs (column 17, lines 5-8; column 20, lines 57-59); and (5) a recording unit

to record the plurality of generated SOBUS and the mapping list on a recordable

recording medium (column 14, lines 63-67; column 15, lines 1-11; column 21, lines 60-

65), and (6) a reproducing apparatus (column 13, lines 24-26) to reproduce data from a

reproduceable recording medium, the reproducing apparatus including: (i) a stream data

playback controller, which is a reading unit, to read the mapping list as search

information (column 22, lines 33-37, 44-56); and (ii) a reproducing control unit to search

for a corresponding SOBU by referring to a generated search information (column 22,

lines 33-56) and regarding a value of the predetermined application time stamp as the

value of an application time stamp for the last one of the SOBUs in the stream object

when referring to the read mapping list (column 36, lines 48-54).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

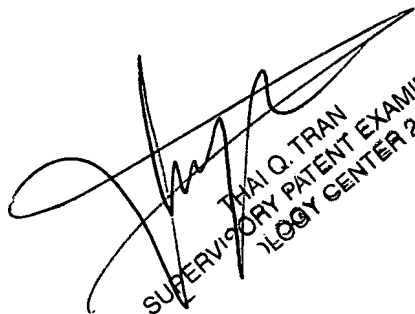than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hung Q. Dang whose telephone number is 571-270-

1116. The examiner can normally be reached on M-Th:7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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Hung Dang
Patent Examiner